

CLAIMED INVENTION

We claim:

- 1 1. A method comprising:
 - 2 calendaring a plurality of virtual connections for processing, each virtual
 - 3 connection calendared to a particular time period such that the virtual
 - 4 connections are not calendared to at least one time period;
 - 5 storing a plurality of virtual connection addresses in a cache memory; and
 - 6 processing a virtual connection corresponding to one of the plurality of
 - 7 virtual connection addresses during one of the at least one time periods.
- 1 2. The method of claim 1, wherein the most recently processed calendared
- 2 virtual connection is stored in the cache memory.
- 1 3. The method of claim 1, wherein virtual connections corresponding to the
- 2 virtual connection addresses stored in the cache memory are processed in a
- 3 round-robin fashion.
- 1 4. The method of claim 1, further comprising:
- 2 processing a calendared virtual connection; and

1 5. The method of claim 4, wherein evaluating comprises:

- 2 determining that the address of the processed calendared virtual
- 3 connection is not currently in the cache memory;
- 4 determining that the processed calendared virtual connection has more
- 5 data to transmit; and
- 6 determining that a recipient can receive more data.

1 6. The method of claim 4, wherein the address of a processed calendared
2 virtual connection meeting the evaluation criteria is stored in a first cache
3 memory position.

1 7. An apparatus comprising:

2 means for calendaring a plurality of virtual connections for processing,
3 each virtual connection calendared to a particular time period such that the
4 virtual connections are not calendared to at least one time period;
5 means for storing a plurality of virtual connection addresses in a cache
6 memory; and

6 determining that a recipient can receive more data.

1 12. The apparatus of claim 10, wherein the address of a processed calendared
2 virtual connection meeting the evaluation criteria is stored in a first cache
3 memory position.

1 13. A machine-readable medium that provides executable instructions, which
2 when executed by a processor, cause said processor to perform a method
3 comprising:

4 calendaring a plurality of virtual connections for processing, each virtual
5 connection calendared to a particular time period such that the virtual
6 connections are not calendared to at least one time period;

7 storing a plurality of virtual connection addresses in a cache memory; and
8 processing a virtual connection corresponding to one of the plurality of
9 virtual connection addresses during one of the at least one time periods.

1 14. The machine-readable medium of claim 13, wherein the most recently
2 processed calendared virtual connection is stored in the cache memory.

1 15. The machine-readable medium of claim 13, wherein virtual connections
2 corresponding to the virtual connection addresses stored in the cache memory
3 are processed in a round-robin fashion.

1 16. The machine-readable medium of claim 13, further comprising:
 2 processing a calendared virtual connection; and
 3 evaluating the processed calendared virtual connection such that if the
 4 processed calendared virtual connection meets evaluation criteria the address of
 5 the processed calendared virtual connection is added to the cache memory.

1 17. The machine-readable medium of claim 16, wherein evaluating comprises:
 2 determining that the address of the processed calendared virtual
 3 connection is not currently in the cache memory;
 4 determining that the processed calendared virtual connection has more
 5 data to transmit; and
 6 determining that a recipient can receive more data.

1 18. The machine-readable medium of claim 16, wherein the address of a
 2 processed calendared virtual connection meeting the evaluation criteria is stored
 3 in a first cache memory position.

1 19. An apparatus comprising:
 2 a virtual connection calendaring unit for calendaring a plurality of virtual
 3 connections for processing, each virtual connection calendared to a particular

- 2 determining that the address of the processed calendared virtual
- 3 connection is not currently in the cache memory;
- 4 determining that the processed calendared virtual connection has more
- 5 data to transmit; and
- 6 determining that a recipient can receive more data.

- 1 24. The apparatus of claim 22, wherein the address of a processed calendared
- 2 virtual connection meeting the evaluation criteria is stored in a first cache
- 3 memory position.